

A burst electrode system is provided that comprises an electroactive polymer having thereon either a polyanionic or polycationic dopant, and a biologically active ingredient that is releasable from said electroactive polymer, whereby said burst electrode system exhibits a release profile greater in quantity and faster than a standard Faradaic profile. The biologically active ingredient preferably is a drug. The electroactive polymer preferably is a polypyrrole or a polypyrrole polyelectrolyte complex such as polypyrrole poly(styrene sulfonate), heparin or polyacrylic acid.